

Layer (type)	Output Shape	Param #
input_1 (InputLayer)	(None, 1)	0
lambda_1 (Lambda)	(None, 512)	0
dense_1 (Dense)	(None, 128)	65664
dropout_1 (Dropout)	(None, 128)	0
dense_2 (Dense)	(None, 1)	129
Total params: 65,793		
Trainable params: 65,793		
Non-trainable params: 0		

Train on 90000 samples, validate on 15000 samples

```
Epoch 1/20
90000/90000 [=====] - 159s 2ms/step - loss: 0.3535 - acc: 0.8448 - val_loss: 0.3383 - val_acc: 0.8515
Epoch 2/20
90000/90000 [=====] - 152s 2ms/step - loss: 0.3228 - acc: 0.8601 - val_loss: 0.3181 - val_acc: 0.8631
Epoch 3/20
90000/90000 [=====] - 159s 2ms/step - loss: 0.3132 - acc: 0.8653 - val_loss: 0.3083 - val_acc: 0.8669
Epoch 4/20
90000/90000 [=====] - 152s 2ms/step - loss: 0.3047 - acc: 0.8696 - val_loss: 0.3129 - val_acc: 0.8643
Epoch 5/20
90000/90000 [=====] - 152s 2ms/step - loss: 0.2977 - acc: 0.8718 - val_loss: 0.2984 - val_acc: 0.8725
Epoch 6/20
90000/90000 [=====] - 155s 2ms/step - loss: 0.2922 - acc: 0.8759 - val_loss: 0.2962 - val_acc: 0.8751
Epoch 7/20
90000/90000 [=====] - 158s 2ms/step - loss: 0.2864 - acc: 0.8771 - val_loss: 0.2935 - val_acc: 0.8749
Epoch 8/20
90000/90000 [=====] - 158s 2ms/step - loss: 0.2813 - acc: 0.8819 - val_loss: 0.2908 - val_acc: 0.8756
Epoch 9/20
90000/90000 [=====] - 159s 2ms/step - loss: 0.2774 - acc: 0.8829 - val_loss: 0.2849 - val_acc: 0.8775
Epoch 10/20
90000/90000 [=====] - 152s 2ms/step - loss: 0.2712 - acc: 0.8855 - val_loss: 0.2846 - val_acc: 0.8795
Epoch 11/20
90000/90000 [=====] - 151s 2ms/step - loss: 0.2671 - acc: 0.8881 - val_loss: 0.2775 - val_acc: 0.8838
Epoch 12/20
90000/90000 [=====] - 156s 2ms/step - loss: 0.2626 - acc: 0.8902 - val_loss: 0.2751 - val_acc: 0.8827
Epoch 13/20
90000/90000 [=====] - 157s 2ms/step - loss: 0.2586 - acc: 0.8930 - val_loss: 0.2753 - val_acc: 0.8845
Epoch 14/20
90000/90000 [=====] - 151s 2ms/step - loss: 0.2548 - acc: 0.8935 - val_loss: 0.2707 - val_acc: 0.8874
Epoch 15/20
90000/90000 [=====] - 156s 2ms/step - loss: 0.2504 - acc: 0.8969 - val_loss: 0.2699 - val_acc: 0.8869
Epoch 16/20
90000/90000 [=====] - 158s 2ms/step - loss: 0.2452 - acc: 0.8988 - val_loss: 0.2671 - val_acc: 0.8877
Epoch 17/20
90000/90000 [=====] - 158s 2ms/step - loss: 0.2429 - acc: 0.9000 - val_loss: 0.2633 - val_acc: 0.8901
Epoch 18/20
50/90000 [.....] - ETA: 1:52 - loss: 0.3103 - acc: 0.8400C:\Users\shaggyday\AppData\Local\Programs\Python\Python37\lib\site-packages\keras\callbacks.py:122: UserWarning: Method on_batch_end() is slow compared to the batch update (0.312717). Check your callbacks.
% delta_t_median)
100/90000 [.....] - ETA: 6:33 - loss: 0.2551 - acc: 0.8700C:\Users\shaggyday\AppData\Local\Programs\Python\Python37\lib\site-packages\keras\callbacks.py:122: UserWarning: Method on_batch_end() is slow compared to the batch update (0.156358). Check your callbacks.
% delta_t_median)
90000/90000 [=====] - 158s 2ms/step - loss: 0.2380 - acc: 0.9025 - val_loss: 0.2647 - val_acc: 0.8905
Epoch 19/20
90000/90000 [=====] - 157s 2ms/step - loss: 0.2350 - acc: 0.9034 - val_loss: 0.2583 - val_acc: 0.8951
Epoch 20/20
90000/90000 [=====] - 151s 2ms/step - loss: 0.2308 - acc: 0.9056 - val_loss: 0.2592 - val_acc: 0.8930
45000/45000 [=====] - 61s 1ms/step
```

Test score: 0.25631828440560234

Test accuracy: 0.8945555555555555

